

Abstract of the Disclosure

5 A multi-aperture interferometric optical system collects light propagating from a source of light and develops overlapping diffraction patterns on an optical detector that produces output signals for processing to form an image corresponding to the diffraction patterns. A preferred embodiment of the invention is a large aperture orbiting, earth-watching ring interferometric optical system configured such that there is no macro-structure pointing. Four mirror-ring structures direct incoming light to a multi-spectral primary optical detector that acquires light-pattern information from which an image can be derived.